

Amendments to the Claims:

Following is a complete listing of the claims pending in the application, as amended:

1-21. (Canceled)

22. (Currently Amended) A method for finishing a surface of a protective package on a microelectronic device, comprising:

molding a protective casing around at least a portion of a die to form a package having a molded surface;

before marking the molded surface, chemically etching at least a portion of the molded surface of the package to remove a layer of material from the package and form a marking surface;

cleaning residual materials and/or chemicals from the package after terminating the etching of the package surface; and

marking the marking surface after cleaning residual materials and/or chemicals from the package.

23. (Currently Amended) A method for finishing a surface of a protective package on a microelectronic device, comprising:

molding a protective casing around at least a portion of a die to form a package having a molded surface;

before marking the molded surface, etching at least a portion of the molded surface of the package to remove a layer of material from the package;

cleaning residual materials and/or chemicals from the package after terminating the etching of the package surface; and

marking the surface of the package after cleaning residual materials and/or chemicals from the package;

wherein etching the package includes chemically etching at least a portion of the surface of the package with hydrofluoric acid, and wherein cleaning the package includes rinsing at least a portion of the package with de-ionized water.

24. (Canceled)

25. (Currently Amended) A method for finishing a surface of a protective package on a microelectronic device, comprising:

molding a protective casing around at least a portion of a die to form a package having a molded surface;

before marking the molded surface, etching at least a portion of the molded surface of the package to remove a layer of material from the package;

cleaning residual materials and/or chemicals from the package after terminating the etching of the package surface;

controlling the depth of the etching by determining a depth at which the chemical etching will have removed sufficient blemishes from the package surface to attain a preselected surface finish and terminating the etching at the depth where the preselected surface finish has been attained; and

marking the surface of the package after cleaning residual materials and/or chemicals from the package.

26-48. (Canceled)

49. (Currently Amended) A method for simultaneously finishing a surface of a protective package on each of a plurality of microelectronic devices carried on a common substrate, comprising:

molding a plurality of protective casings around at least a portion of a plurality of individual dies to form a plurality of individual packages having molded surfaces;

before marking the molded surfaces, etching at least a portion of the molded surface of each package to remove a layer of material from the packages;

cleaning residual materials and/or chemicals from the packages after terminating the etching of the package surfaces;

marking the etched surfaces of the packages after cleaning residual materials and/or chemicals from the packages; and

after terminating the etching, cutting the common substrate to separate the microelectronic devices from one another.

50. (Currently Amended) The method of claim 49 wherein etching the surface of ~~each individual packages~~ includes chemically etching at least a portion of the surface of the individual packages with hydrofluoric acid, and wherein cleaning the packages includes rinsing at least a portion of the packages with de-ionized water.

51. (Canceled)

52. (Currently Amended) The method of claim 49, further comprising:
controlling the depth of the etching by determining a depth at which the chemical etching will have removed sufficient blemishes from the package surfaces to attain a preselected surface finish and terminating the etching at the depth where the preselected surface finish has been attained.

53-55. (Canceled)

56. (Previously Presented) A method for packaging a microelectronic device, comprising:

molding package compound at least partially around a microelectronic die in a mold to at least partially encase the microelectronic die, leaving a surface blemish on a marking surface of the mold compound;
removing the package from the mold;
prior to marking the marking surface, etching at least a portion of the marking surface to remove a layer of material from the package;
terminating the etching when the surface blemish has been at least partially removed from the package; and
marking the etched marking surface after terminating the etching.

57. (Canceled)

58. (Currently Amended) The method of claim 56, wherein etching the surface of ~~each~~the package includes chemically etching at least a portion of the surface of the package with hydrofluoric acid, and wherein cleaning the package includes rinsing at least a portion of the package with de-ionized water.

59. (Previously Presented) The method of claim 56, further comprising:
controlling the depth of the etching by determining a depth at which the chemical etching will have removed sufficient blemishes from the package surface to attain a preselected surface finish and terminating the etching at the depth where the preselected surface finish has been attained.

60. (Currently Amended) A method for marking a surface of a protective resin package on a microelectronic device, comprising:

providing a plurality of unmarked microelectronic devices on a common substrate, each of the microelectronic devices including a protective resin package;

before marking the unmarked packages, simultaneously etching at least a portion of the surface of each package to remove a layer of material from each package formed on the common substrate;

terminating the etching when a surface blemish on at least one of the packages has been at least partially removed from the package; and

applying a mark to each of the packages after terminating the etching.

61. (Previously Presented) The method of claim 60, wherein at least one of the microelectronic devices has been identified as having a resin package with a blemish on a primary marking surface of the package, and wherein the surface to be marked is the primary marking surface.

62. (Previously presented) A method for packaging a microelectronic die carried on a substrate, comprising:

molding package compound at least partially around a microelectronic die in a mold to at least partially encase the microelectronic die, leaving a portion of the substrate exposed and leaving a surface blemish on a marking surface of the package compound;

removing the resulting package from the mold;

prior to marking the marking surface, etching at least a portion of the marking surface to remove a layer of material from each package formed on the common substrate;

terminating the etching when the surface blemish has been at least partially removed from the package; and

marking the etched marking surface after terminating the etching.